

68816

Hydrogenation of Furan Compounds on a
Skeleton Cu-Al Catalyst

S/020/60/131/01/030/060
0011/B006

the vapor phase is similar to that of nickel catalysts, but much more selective. 4) This catalyst showed high activity and selectivity in the reduction of furfurylidene diketones and α -alkyl- β -furylacroleins to the corresponding furfuralcohols. At 120-140°C, 1- α -furylalkanols-3, and 2-alkyl-3- α -furylpropanols-1 are obtained in yields of 90-95% and 75-85% respectively. 3-ethyl-1,6-dioxaspiro-(4,4)-nonane and 3-ethyl-1,6-dioxaspiro-(4,4)-nonane were obtained in yields of 12-20% from the hydrogenation products of α -acryl- β -furylacroleins. The physical constants of all these compounds are given in table 1. The authors mention A. A. Ponomarev (Ref 6). There are 1 table and 6 references, 5 of which are Soviet.

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk USSR (Institute of Organic Chemistry named N. D. Zelinskiiy of the Acad. of Sciences, USSR)

DATE: December 9, 1959

AUTHORS: Shuykin, N. I., Corresponding Member
AS USSR, Lebedev, B. L., Pozdnyak, N. A.

S/020/60/131/02/035/071
 B011/B005

TITLE: Synthesis of 6-Alkyltetralines

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol 131, Nr 2, PP 335-337 (USSR)

ABSTRACT: The authors synthesized 6-alkyltetralines. This was necessary for the synthesis of some standard 6-alkyltetralines required for the analysis of catalyzates by means of IR spectroscopy. As pure 6-alkyltetralines could practically not be produced by other methods, the authors followed reference 4. A mixture of 2-alkyl- and 6-alkyltetralines at a ratio of 1:2 develops by hydrogenation of 2-alkylnaphthalenes. The enclosed diagram shows the method of synthesis used by the authors. Tetraline was acylated in nitrobenzene medium according to Friedel-Crafts since in this medium the substitution occurs in the β -position only (Ref 5). By reaction of the tetraline with acid chlorides of corresponding acids in the presence of $AlCl_3$ at 00, the authors obtained the following compounds: 1,2,3,4-tetrahydro-6-naphthylbutyl-, n-amyl-, n-heptyl-, and n-nonylketone (Table 1). Tertiary alcohols were synthesized by Grignard's method. 8-(6-tetralyl)-nonanol-8 with the boiling point 180.5-182.5 (3mm) was first produced by the action of CH_3MgJ on

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Synthesis of 6-Alkyltetralines

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6-tetralylheptylketone. 6-(6-tetralyl)-nonanol-6 (boiling point 162-163°) was first produced by the action of $n\text{-C}_7\text{H}_{15}\text{Br}$ on 6-tetralyl-n-amylketone. Figures 1 and 2 show the IR spectra (recorded by Ye. D. Lubuzh) of the alcohols synthesized. The tertiary alcohols were reduced in the autoclave in the presence of copper chromite (at 120 atm and 240°). They may undergo partial dehydration under these conditions. Therefore, the hydrogenizate with nickel of Raney was additionally hydrogenized at 50° and 70 atm of hydrogen pressure. Table 2 indicates the properties of 6-(1-methyloctyl)-tetraline and 6-(1-n-propylhexyl)-tetraline produced for the first time. The authors produced normal 6-amyltetraline, 6-heptyltetraline, and 6-decyltetraline by reduction of corresponding ketones by means of the modified method (Ref 7), i.e. by decomposition of the hydrazones with sodium in diethylene-glycol medium. There are 2 figures, 2 tables, and 9 references.

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR (Institute of Organic Chemistry imeni N. D. Zelinskiy of the Academy of Sciences, USSR)

SUBMITTED: December 17, 1959
Card 2/2

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510400

AUTHORS:

Shuykin, N. I., Corresponding Member
AS USSR, Bel'skiy, I. F.

S/020/60/131/05/037/069
B011/B117

TITLE:

Catalytic Hydrogenation¹ of Furan¹ Compounds Under Pressure in a
Flow System

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol 131, Nr 5, pp 1117-1119 (USSR)

TEXT: It was established by the authors that an increased hydrogen pressure during the hydrogenation in a continuous flow system favors the hydrogenation of the multiple bonds in the furan ring at any rate. This was most obviously shown with the reaction on platinized carbon, and the least effect was found on nickel catalyst (skeleton Ni-Zn and Ni-Al catalysts). Moreover, increased pressure involves the fact that the reduction of hydroxyl and carbonyl groups on Pt-C taking place prior to hydrogenation of the furan ring becomes the most important, or even the only primary reaction when alkyl furyl carbinols and alkyl furyl ketones are hydrogenized or hydrogenolyzed. Thereby the influence of pressure on the liability of the furan ring to hydrogenation to give a tetrahydrofuran ring, or to hydrolysis has been clarified. Moreover, this influence exerted upon the order and the selectivity of the reduction of various unsaturated bonds in a furan compound has been clarified. 1) The furan ring in silvan is completely hydrolyzed at normal pressure and 275°. Methyl propyl ketone

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Catalytic Hydrogenation of Furan Compounds Under
Pressure in a Flow System

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B011/B117

(reaction II) forms. At 50 at hydrogen pressure, chiefly tetrahydrosilvan (I) results. Hydrogenolysis of the furan ring takes place to a yield of about 25%. 2) At normal pressure, hydrogenolysis of the ring at the C-O bond represents, in addition to the carbonyl group, the primary hydrogenation reaction of 2-methyl-5-acetyl-furan on Pt-C. About 20% is due to the primary reduction of the carbonyl group. With hydrogenation at 50 at pressure and 230-250°, the latter reaction practically becomes the only one to proceed. 3) Under the latter conditions, the hydroxyl group in alkyl furyl carbinols is reduced prior to the hydrogenation of the furan ring. 4) From silvan, 20% tetrahydrosilvan is formed at most when a skeleton Ni-Zn catalyst at 150° is used. By elevated pressure, the multiple bonds in the furan ring are hydrogenated, and hydrogenolysis is suppressed. This effect is less pronounced on Ni-Zn than on Pt catalysts. 5) The skeleton Ni-Al catalyst has, unlike other Ni catalysts, a specific capacity to effect the so-called "conjugated" hydrogenolysis of the furan ring when hydrogenation is performed in continuous systems and at normal pressure. The furan ring in α -alkyl furans is completely split at 235-250° with three ketone series being formed: alkanones-2, -3, and -4. The elevated hydrogen pressure (50 at) used to hydrogenate silvan leads to the formation of about 50% tetrahydrosilvan, 45% aliphatic ketones and alcohols, and about 5% hepta-compounds at 270°.

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Catalytic Hydrogenation of Furan Compounds Under
Pressure in a Flow System

S/020/60/131/05/037/069
B011/B117

There are 4 Soviet references.

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk
SSSR (Institute of Organic Chemistry imeni N. D. Zelinskiy of the
Academy of Sciences, USSR) 4

SUBMITTED: November 23, 1959

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5.3200

S/020/60/132/03/26/066
B011/B008

AUTHORS: Bel'skiy, I. F., Shuykin, N. I., Corresponding Member
AS USSR, Karakhanov, R. A.

TITLE: Thermal Dehydrogenation of 2,5-Dihydrofurans

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 132, No. 3,
pp. 585-586

TEXT: The authors produced 2-methyl-, 2-ethyl- and 2-isopropyl-2,5-dihydrofuran under such conditions and investigated their transformations, under which 2-methyl-4,5-dihydrofuran is isomerized to methyl-cyclopropyl-ketone. The vapors of the compounds mentioned in the introduction were passed over crushed quartz or activated carbon at 470-480°. It turned out that 2-alkyl-2,5-dihydrofurans are very easily dehydrogenated to corresponding furan-homologues (see Scheme). The reaction proceeds equally easily over quartz and activated carbon. The authors conclude therefrom that this dehydrogenation is not a catalytic reaction, but is only caused by temperature which must be fairly high; 350°, for instance, are insufficient for this purpose. At 470-480° the tetra-

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S/020/60/132/04/35/064
B011/B003

AUTHORS:

Shuykin, N. I., Corresponding Member of the AS USSR,
Bel'skiy, I. F., Vasilevskaya, G. K.

TITLE:

Catalytic Conversion of 2-Alkyl-5-acylfurans Into
Alkylphenols

PERIODICAL:

Doklady Akademii nauk SSSR, 1960, Vol. 132, No. 4,
pp. 861-863

TEXT: The authors investigated the catalytic hydrogenation of the following alkylacylfurans on Pt-C in a continuous system and at usual pressure: 2-acetylfuran, 2-ethyl-5-acetylfuran, 2-methyl-5-propionylfuran, and 2-n-propyl-5-acetylfuran. Hydrogenation occurred at 300 - 310°. In all cases the furan ring was hydrogenated on the C—O bond which is adjacent to the carbonyl group. The resulting intermediates (1,5-diketones) were cyclized in the vapor phase in hydrogenation. Homologs of cyclohexenone formed, which were subsequently dehydrogenated to the corresponding phenol homologs. Carbocyclization of nonsymmetrical

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Catalytic Conversion of 2-Alkyl-5-acyl-
furans Into Alkylphenols

S/020/60/132/04/35/064
B011/B003

holds a special position among the compounds investigated. By its hydrogenolysis on the C—O bond adjacent to the carbonyl group a ketoaldehyde forms. It may not be hydrogenated like a diketone, but is completely decarbonylated to form pentanone-2. There are 4 references, 3 of which are Soviet.

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo
Akademii nauk SSSR (Institute of Organic Chemistry imeni
N. D. Zelinskiy of the Academy of Sciences, USSR)

SUBMITTED: February 22, 1960

Card 3/3

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5.3306 only 2209, 1285

S/020/60/133/005/033/034/XX
B016/B060

AUTHORS: Shuykin, N. I., Corresponding Member AS USSR, Erivanskaya,
L. A., and Yan Ay-si

TITLE: Catalytic Dehydrocyclization of β -n-Butyl Naphthalene

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 133, No. 5,
pp. 1125 - 1127

TEXT: Of late, N. I. Shuykin (Refs. 4, 5) has proved that high-molecular alkanes of normal structure (e.g., hexa-, hepta-, and octadecanes) undergo dehydrocyclization under certain conditions. Condensed systems of naphthalene, phenanthrene, benzantracene and chrysene are then formed. In the work under consideration, the authors carried out the dehydrocyclization of β -n-butyl naphthalene to phenanthrene and anthracene. They established that, under the conditions applied here, a cyclization takes place at the α -carbon atom of the naphthalene ring, which is nearest to the butyl group. Phenanthrene is preferably formed in this case. The authors' experiments took place at 400°, 450°, 500°, and 550°C, aluminum chromium (20% of chromium oxide) being used as a catalyst. The catalyst was regenerated

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L 32773-65 EEC(a)/EWT(l)/EEC(j)/FS(v)-3/EWP(m)/EEC(r)/EWA(d)/EWG(v) Po-4/Pq-4/
Pe-5/Pg-4 GW
ACCESSION NR: AT5004756 S/3132/63/000/056/0189/0201

AUTHOR: Shuvalov, V. V.

TITLE: Light pressure as a dynamic factor in the motion of artificial celestial bodies

SOURCE: Yaroslavl. Gosudarstvennyy pedagogicheskiy institut. Uchenyy zapiski, no. 56, 1963. Sbornik rabot po astrofizike (Collection of papers on astrophysics), 189-201

TOPIC TAGS: artificial earth satellite, light pressure, satellite orbit

ABSTRACT: Only the first chapter of the article, entitled "Physical principles and mathematical apparatus of the problem," is reviewed in this abstract. The chapter consists of five sections. The first, entitled "Light pressure, its nature, significance of the work of P. N. Lebedev" deals with the existence of light pressure and the

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ACCESSION NR: AT5004756

past difficulties of its detection. The second section, "Photogravitational problem of two bodies. Energy integral" is devoted to a derivation of the laws governing the interaction between two bodies, with account taken of both the gravitational and the light interaction. The generalized interaction of two bodies that are attracted gravitationally and are either attracted or repelled by virtue of the radiation interaction is treated, along with the case when one of the bodies has vanishingly small mass. The third section, "The Poynting-Robertson effect and the planetocentric effect of radiation deceleration" deals with some effects due to radiation pressure in the solar system, and shows that radiation effects cannot produce a noticeable influence on the perturbation of the motion of artificial earth satellites. Section 4 is entitled "Osculating elements. The Krylov-Bogolyubov method." This section deals with the planetocentric motion of a particle along a spiral, which within a short time interval can be described by a circle. The periodic changes in the oscillating elements due to the main force of light pressure can

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ACCESSION NR: AT5004756

lead to appreciable secular or long-period terms in the case of elliptic planetocentric motion, and the resultant perturbations are evaluated by using the approximate Krylov-Bogolyubov integration method. The fifth section, "Theorem on the mean weight of element perturbation," deals with the case of a spiral trajectory approximated by an ellipse with a perigee that follows the radius vector at approximately equal angular velocity. Since this problem cannot be solved by the method of the preceding section, the author proves the following theorem. If the product of the instantaneous positive velocities is equal to unity, then the product of the mean velocities is larger than or equal to unity. This theorem can be generalized in the case when the product of the instantaneous velocities is equal to any constant quantity. The particular application of the theorem is dealt with in later chapters of the paper. Orig. art. has: 33 formulas.

ASSOCIATION: Yaroslavskiy gosudarstvennyy pedagogicheskiy institut

Card 3/4

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SHUVALOV, YA. A.

Geography & Geology

Fundamentals of topography, Moskva, Gos. uchebno-pedagog., Izd-vo, 1951.

Monthly List of Russian Accessions, Library of Congress, March 1952. Unclassified.

SHUVALOV, Yakov Arkad'yevich; GRUNBERG, G.Yu., redaktor; MAKHOVA, N.N.,
tekhnicheskii redaktor

[Surveying by sight; an aid for geography teacher] Glasomernaiia
s"emka; v pomoshch' uchiteliu geografii. Moskva, Gos.uchebno-
pedagog. izd-vo Ministerstva prosvetshcheniia RSFSR, 1955. 52 p.
(Topographical drawing) (MIRA 9:3)

2.

SHUVALOV, Yakov Arkad'yevich; GALKIN, P.D., redaktor; MAKHOVA, N.H.,
tekhnicheskiy redaktor.

[Fundamentals of topography] Osnovy topografii. Izd. 2-oe,
Moskva, Gos.uchebno-pedagog. izd-vo Ministerstva prosveshchenia
RSFSR, 1955. 343 p. (MLRA 9:1)
(Topographical surveying)

MOSHKIN, Aleksandr Mikhaylovich; OLENEV, A.; SHUVALOV, Ye.

[Sverdlovsk Province] Sverdlovskaya oblast'. Sverdlovsk,
Sverdlovskoe knizhnoe izd-vo, 1962. 210 p.
(MIRA 18:4)

SHUVALOV, Ye.A.; YERGIYEVA, E.V.; VEGNER, M.I.

New method of determining the ash content of coals. Koks i khim.
no.1:10-11 '60. (MIRA 13:6)

1. Ugleobogatitel'naya fabrika im. Kostenko.
(Coal--Analysis)

SHEVVALOV, Ye. F.																									
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<p>Liquation of berthierite ores of antimony. E. F. Shevvalov. <i>Livnyy Metal</i>, 1930, No. 10 11, 133 1. Berthierite, chemically $\text{FeS}_2\text{Sb}_2\text{S}_3$, is found in some Sb ores together with antimonite. In the flotation of these ores the antimonite is collected but berthierite is lost in the tailings. Instead of flotation, therefore, a liquation process is used, whereby antimonite is liquified at $820-875^\circ$ and trickles down through the charge where it is collected. To study the behavior of berthierite in this process, lab. melts were made at $700-800^\circ$. These tests showed that the Fe in berthierite is not liquated and that most of it remains in the residue in the form of magnetic oxide of iron. The initial mixts. tested contained 8.6 to 12.8% iron; the liquated Sb_2S_3 product contained 1.9-2.9% Fe. 5 references. W. N. Dambolt</p>																									
<p>ASB-51A METALLURGICAL LITERATURE CLASSIFICATION</p>																									
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Zap.Ural fil. Geog. ob-va SSR no.4:129-140 '61.

(MIRA 18:12)

SHUVALOV, Ye.L.

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SHKVALOV, Ye. L.

"Geography of Agriculture of the Northeastern Regions of Dagestan ASSR." Sub 3 Jan 52, Moscow State Pedagogical Inst imeni V. I. Lenin.

Land Geographical Sci
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SO: Sum. No. 480, 2 May 55

SHUVALOV, Ye.L.
SHUVALOV, Ye.L.

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no.5:23-31 S-O '57. (MIRA 10:12)
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SHUVALOV, Yefim Lukich; RODIONOVA, F.A., red.

[Economic geography of the U.S.S.R.; a general survey.
Textbook for the 8th grade] Ekonomicheskaiia geografiia
SSSR; obshchii obzor. Uchebnoe posobie dlia VIII klassa.
Moskva, Prosveshchenie, 1965. 93 p. (MIRA 18:7)

KOSHKIN, P.P., krayeved; SHUVALOV, Ye.L., dotsent; KOLOSEVITSYN, V.,
red.; PAL'MINA, N., tekhn. red.

Karyshlov. Sverdlovsk, Sverdlovskoe knizhnoe izd-vo, 1961. 134 p.
(Mira 15:8)

(Karyshlov)

SHUVALOV, Ye.L. (Sverdlovsk)

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MOSEKIN, A.M., dots.; OLENEV, A.M., dots.; SHUVALOV, Ye.L.,
dots.; PEKAREVICH, V.M., retsenzents; DAVYLOVA, I., red.

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Sredne-Ural'skoe knizhnoe izd-vo, 1964. 225 p.

(MIRA 17:11)

9(4)

SOV/112-59-5-9833

Translation from: Referativnyy zhurnal. Elektrotehnika, 1959, Nr 5, p 200 (USSR)

AUTHOR: Kobyshev-Kuz'min, G. M., and Shuvalov, Ye. V.

TITLE: Noise Properties of Soviet Junction Transistors

PERIODICAL: Tr. Vses. n.-i. in-t radioveshchat. priyema i akust., 1957,
Nr 8, pp 3-33

ABSTRACT: Results of an experimental investigation of the noise factor F of Soviet junction transistors in a grounded-emitter circuit are reported. The integral value of F was determined for two bands: 20-10,000 cps and 300-10,000 cps. The noise factor was calculated from the formula

$$F = U_{sh}^2 / (4kTR_o \Delta f K_E^2),$$

where U_{sh} is the noise voltage at the transistorized amplifier output, R_o is the input resistor, Δf is the effective pass band that can be determined by a numerical integration, K_E is the voltage gain measured by a sine-wave

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Noise Properties of Soviet Junction Transistors

oscillator. A spectrum analyzer was used for the spectral analysis of F . The dependence of F on the frequency, R_0 , emitter current I_e , and the collector voltage U_k was investigated. Investigation of three samples of the low-noise P1D transistor showed that the semiconductor noise extends up to 700-1,000 cps; at frequencies over 3,000 cps, the noise factor F grows because K_E decreases. An expression for F in a grounded-emitter circuit (accounting for thermal and schrot effects) was derived from an analysis of T-type equivalent circuit containing three noise generators. By differentiating the F expression with respect to R_0 , a formula for the optimum value of the internal source resistance R_0 opt can be found. Experimental curves for 16 samples of P1 and P2 transistors are presented; a blunt minimum of F with $R_0 = 100$ -600 ohms was obtained. A deviation of the experimental minimum from the calculated one (200 - 1,000 ohms) is due to the semiconductor noise. With a different emitter current, the calculated noise factor has a minimum at $I_e = 0.5$ ma.

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SOV/112-59-5-9833

Noise Properties of Soviet Junction Transistors

Experimental curves $F(I_e)$ for three P1D transistors are presented; they clearly show the minimum F at $I_e = 0.5$ ma. Curves $F(U_k)$ for three samples of P1D are presented. With $(U_R) < 10-15$ v, F is almost independent of U_k ; however, F increases sharply if U_k grows further. Expressions for F and R_o opt for the three fundamental circuits are submitted. A comparison showed that for a minimum F , with $K_E - K_E$ max, the common-emitter circuit should be used.

N.V.B.

Card 3/3

SHUVALOV, Yu. A.

SLAVIN, D. O.; SOKOLOV, N. V.; GAVRILKIN, N. N.; POPLAVKO, M. V.; SHUVALOV, Yu. A.

Tekhnologiya Metallov, published by Mashgiz, Moscow, 1949

~~XXX~~ Sum #148

SHUYALOV YU A.

BRYUKHANOV, A.N.; LAKHTIN, Yu.M.; MALYSHEV, A.I.; NIKOLAYEV, G.N.; SHU-
VALOV, Yu.A.; SHISHKOV, P.P., kandidat tekhnicheskikh nauk; dotsent,
retsensent; ARSHINOV, V.A., kandidat tekhnicheskikh nauk, retsensent;
LOSEV, I.S., inzhener, retsensent; YEGORNOV, A.N., professor, redaktor;
VYDRIN, P.G., inzhener, redaktor; SOKOLOVA, T.F., tekhnicheskiy redaktor.

[The technology of metals] Tekhnologiya metallov. Moskva, Gos. nauchno-
tekhn. izd-vo mashinostroit. lit-ry, 1954. 624 p. (MLRA 7:11)
(Metals)

Shuvalov, Yuliy Ivanovich

MALYSHEV, Anatoliy Ivanovich; NIKOLAYEV, Grigoriy Nikolayevich; ~~SHUVALOV~~
~~Yuliy Ivanovich~~; ANDRIANOV, I.I., inzhener, retsenzent;
KUNYAVSKIY, M.M., kandidat tekhnicheskoy nauk, redaktor [deceased];
RZHAVINSKIY, V.V., inzhener, redaktor; SHAMSHURINA, Ye.A.,
redaktor izdatel'stva; SOKOLOVA, T.F., tekhnicheskoy redaktor;
UVAROVA, A.F., tekhnicheskoy redaktor

[Technology of metals] Tekhnologiya metallov. Moskva, Gos.
nauchno-tekhn. izd-vo mashinostroit.lit-ry, 1957. 371 p..
(Metals) (Metalwork) (MIRA 10:11)
(Metallurgy)

SHUVALOV, YULIY AVRAAMOVICH

PHASE I BOOK EXPLOITATION

477

Shuvalov, Yuliy Avraamovich and Vedenskiy, Viktor Aleksandrovich
Metallorezhushchiye stanki; kinematicheskiye i gidravlicheskiye
skhemy (Metal-cutting Machine Tools; Kinematic and Hydraulic
Diagrams) Moscow, Mashgiz, 1958. 242 p. 25,000 copies printed.

Reviewers: Nalchan, A.G., Candidate of Technical Sciences;
Ed.: Vladziyevskiy, A.P., Doctor of Technical Sciences;
Managing Ed.: of General Technical Literature and Catalogues:
Ponomarev, K.A., Engineer; Tech. Eds.: Matveyeva, Ye. N. and
El'kind, V.D.

PURPOSE: This book is a textbook for students of mechanical
engineering and polytechnical vuzes.

COVERAGE: The book contains diagrams of speed and feed mechanisms
and assemblies and mechanisms for special and auxiliary movement.
Kinematic and hydraulic diagrams for some metal-cutting machines
are presented. Technical characteristics of the most widely
used modern metal-cutting machines are briefly given.

~~Card 1/10~~

SHUVALOV, YU.A.

3-58-3-16/32

AUTHOR: Annenkova, Ye.G., Nikulin, N.S., Shashkin, A.S., Shuvalov Yu.A., Dotsents and Candidates of Technical Sciences

TITLE: Ways of Improving the Teaching Process (Puti sovershenstvovaniya uchebnogo protsessa) Some Considerations on the Training Course in Metal-Cutting Machine Tools (Nekotoryye soobrazheniya o kurse metallovezhushchikh stankov)

PERIODICAL: Vestnik Vysshey Shkoly, 1958, Nr 3, pp 63 - 65 (USSR)

ABSTRACT: For the purpose of rationalizing the teaching process, the above named authors have made the attempt to utilize a maximum of generalizations in lectures on metal-cutting machine tools. The trial proved successful. New, methodical and scientific principles for preparing lectures permit the study of machine tools according to a unified plan. The structural analysis - the basis of a course - defines the structure of every lecture. Visual aids are not excluded, but they serve only as auxiliary material for the lecturer. Principally the lecture is built on maximum generalizations. These are: kinematical shaping of surfaces, the theory of kinematic chains, schematizing the work of mechanisms, explaining the hydraulic outfit of machine tools by means of structural sweep, and the appli-

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3-58-3-16/32

Ways of Improving the Teaching Process. Some Considerations on the Training Course in Metal-Cutting Machine Tools

cation of structural kinematic schemes.

ASSOCIATION: Moskovskiy poligraficheskiy institut (Moscow Polygraphic Institute) Moskovskiy avtomekhanicheskiy institut (Moscow Automechanic Institute) Moskovskiy vecherniy mashinostroitel'nyy institut (Moscow Evening Machine-Building Institute)

AVAILABLE: Library of Congress

Card 2/2

BRYUKHANOV, Andrey Nikolayevich; LAKHTIN, Yuriy Mikhaylovich; MALYSHEV, Anatoliy Ivanovich; NIKOLAYEV, Grigoriy Nikolayevich; SHUVALOV, Yuliy Avraamovich; RYBIN, V.V., inzh., retsenzent; GLIKIN, N.M., kand. tekhn. nauk, red.; RZHAVINSKIY, V.V., red. izd-va; MODEL', B.I., tekhn. red.

[Technology of metals] Tekhnologiya metallov. Izd.2., perer. i dop. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1959.
599 p. (MIRA 14:7)

(Metallurgy)

ALOV, Yu. A.

PHASE I BOOK EXPLOITATION SOV/4525

Terekhov, Georgiy Aleksandrovich, Docent, and Yuliy Avraamovich Shuvalov, Candidate of Technical Sciences

Avtomatizatsiya tekhnologicheskikh protsessov mekhanicheskoy obrabotki i sborki v mashinostroyenii (Automation of Mechanical Working and Assembly Processes in Machine Building) Moscow, Mashgiz, 1960. 320 p. Errata slip inserted. 20,000 copies printed.

Reviewer: A.V. Ettel', Engineer; Ed.: P.A. Kunin, Engineer; Managing Ed. for Literature on Metal Working and Machine-Tool Making (Mashgiz): V.I. Mitin, Engineer; Tech. Ed.: T.F. Sokolova.

PURPOSE: This book is intended as a textbook for students in machine-building tekhnikums.

COVERAGE: Basic information is given on the automation of machining of blanks and the assembling of machine parts. The authors present the fundamentals of feeding of automatic machines, clamping of blanks, and dimensional control of blanks and finished parts. Problems of designing mechanized systems with

Card ~~1/5~~

Automation of Mechanical Working (Cont.)

SOV/4525

copying and other types of automatic program control are discussed briefly inasmuch as they are treated in the course "Metal-Cutting Machine-Tools". Information on planning the processing of parts on the transfer machines and hoisting, conveying and reloading devices is also discussed. The contributions to automation made by I.N. Voznesenskiy, Corresponding Member of the Academy of Sciences USSR, and A.A. Andronov, Academician, are mentioned. There are 40 references, all Soviet.

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Ch. I. Automation Systems of Metal-Cutting Machine Tools and Schematic Layouts of the Automatic-Cycle Control	15
1. Cyclic and non-cyclic systems in automation of metal-cutting machine tools	15
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Card 2/6	

TEPINKICHIYEV, Vladimir Karpovich, prof., doktor tekhn. nauk;
SHUVALOV, Yu.A., kand. tekhn. nauk, dots., retsenzent;
MOROZOVA, M.N., red. izd-va; CHERNOVA, Z.I., tekhn. red.

[Machine tools in the agricultural machinery industry] Metal-
loreshushchie stanki v sel'skokhoziaistvennom mashinostroeni.
Moskva, Mashgiz, 1962. 424 p. (MIRA 15:3)
(Machine tools) (Agricultural machinery)

SHASHKIN, Aleksandr Semenovich; SHUVALOV, Yu.A., prof., retsenzent;
BALANDIN, A.F., red. izd-va; SMIRNOVA, G.V., tekhn. red.

[Structural analysis of the elements of metal-cutting machine
tools] Strukturnyyi analiz elementov metallovezhushchikh stankov.
Moskva, Mashgiz, 1962. 262 p. (MIRA 15:12)
(Machinery, Kinematics of) (Machine tools)

DEMENT'YEV, V.I. , kand. tekhn. nauk; OGRINCHUK, A.N., kand. tekhn. nauk;
TEREKHOV, G.A., dots.; SHLYAPNIKOV, A.I., dots.; SHUVALOV, Yu.A.,
kand. tekhn. nauk; KAMENIR, Ya.A., kand. tekhn. nauk, retsenzent;
PANTELEYEV, V.V., inzh., retsenzent; BAZHENOV, D.V., red. izd-
va; UVAROVA, A.F., tekhn. red.

[Means for the automation of machining processes; manual] Sred-
stva avtomatizatsii mekhanicheskoi obrabotki; spravochnoe po-
sobie. Moskva, Mashgiz, 1962. 520 p. (MIRA 15:3)
(Metalcutting) (Automation)

MALYSHEV, A.I.; NIKOLAYEV, G.N.; SHUVALOV, Yu.A.; SAMOKHOTSKIY,
A.I., red.; VOLKOVA, N.A., red.; VORONINA, R.K., tekhn.
red.

[Technology of metals and building materials] Tekhnologiya
metallov i konstruktsionnye materialy. Moskva, Vysshaya
shkola, 1963. 429 p. (MIRA 16:7)
(Metalwork) (Building materials)

3. V. A.I.; S. RUVAL V, Yu. I.

Age of the Kyrlykuluk intrusion in northern Kazakhstan. Dokl. Akad. Nauk SSSR 137 no. 2:397-399 Apr '61. (DIA 14:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologicheskii institut.
Predstavleno akademikom D.I. Shcherbakovym.
(Kyrlykuluk region—Azeks, Igneous)

SHALIMOVICH, V.N.; SHUVALOV, Yu.N.

Ultrastructure of the vitelline membrane of oocytes of the river lamprey (*Lamprocyba fluviatilis* L.). Dokl. AN SSSR 186 no.1:211-212 Jg '66. (MIRA 19:1)

1. Leningradskiy pediatricheskiy meditsinskiy institut. Submitted February 22, 1965.

SEYMENKIN, A.F., starshiy nauchnyy sotrudnik; SHCHERBOV, Yu.N., mladshey
nauchnyy sotrudnik

Studying the toxicity of potatoes treated with the preparation
"TB." Veterinariia 42 no.11:58-60 N '65.

(MIRA 19:1)

1. Kazanskiy veterinarnyy institut.

BERGASH, R. Ya.; SHUMALOV, Yu. N.

Photoelectricity

Effect of temperature on photoconductivity of leadsulfide photoresistors. Vest.
Len. un. 7, No. 9, 1952.

Monthly List of Russian Accessions, Library of Congress, June 1953. Uncl.

SHUVALOV, YU. N.

SHUVALOV, YU. N. -- "The Connection between the Distribution of Electronic Density and the Electric Conductivity of Cadmium Sulfide Crystals." Leningrad Order of Lenin State University imeni A. A. Zhdanov, Leningrad, 1956. (Dissertation for the Degree of Candidate of Physicomathematical Sciences)

SO: Knizhnaya Letopis' No 44, October 1956, Moscow

SHUVALOV, YU. N.

Electron density distribution and the electric conductivity of cadmium sulfide crystals. Yu. N. Shuvalov (A. A. Zhdanov State Univ., Leningrad). Invest. Akad. Nauk S.S.S.R., Ser. Fiz. 20, 1553-4 (1958); cf. C.A.B. 51, 10226f. — The electron d. of hexagonal CdS crystals was detd. by Fourier analysis of Weissenberg x-ray reflection pictures. The resistivity of the crystals varied from 0.0025 to 110 megohm cm. There is a considerable change in reflected intensities from high ohmic to low ohmic crystals. Calcns. on a high ohmic and a low ohmic crystal show considerable differences in electron d. distribution. In a high ohmic crystal the electron d. is approx. equal in all directions, except the nearest distance between atoms, where it is low; in a low ohmic crystal the electron d. is large in the direction of the atoms and small between them, forming electron bridges between atoms. — S. Pakser

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for

3 SHUVALOV, Yu. N.

USSR / Physical Chemistry. Crystals.

B-5

Abs Jour : Ref Zhur - Khimiya, No 8, 1957, 25952

Author : Yu. N. Shuvalov

Title : Connection Between Electrical Conductivity and Redistribution of Electron Density in Cadmium Sulfide Crystals.

Orig Pub : Zh. tekhn. fiziki, 1956, 26, No 9, 1870 - 1879

Abstract : Hexagonal synthetic monocrystals of CdS of various conductivity and photosensitivity were investigated roentgenographically. A one-way alteration of the intensity of most important reflexes was established, this alteration occurring at the transition to specimens with a greater electroconductivity, or at an increase of the specimen conductivity by the action of light or by heating. Using the synthesis of Fourier, two-dimensional projections of the electron density (ED) in crystals were plotted for various specimens, and the redistribution of the ED was observed.

Card : 1/2

SHUVALOV, Yu. N.

USSR/Electricity - Semiconductors

G-3

Abs Jour : Referat Zhur - Fizika, No 5, 1957, 12202

Author : Shuvalov, Yu.N.

Inst : Leningrad State University, USSR.

Title : Redistribution of Electron Density in a Crystal of Cadmium Sulphate in Connection with the Changes of Its Electric Conductivity.

Orig Pub : Dokl. AN SSSR. 1956, 109, No 4, 753-756

Abstract : The author explains the connection between the electric conductivity of well bounded hexagonal single crystals of CdS and the distribution of the electron density in such crystals, by comparing the ratio of the intensities of the neighboring reflexes of rotation X-ray patterns of specimens with different conductivity. It turns out that as the crystal conductivity increases, certain of

Card 1/2

AUTHOR: Shuvalov, Yu. N.

54-1-5/17

TITLE: ~~On the Investigation of the Distribution of Electron~~
Density in Crystals (K issledovaniyu raspredeleniya
elektronnoy plotnosti v kristalle)

PERIODICAL: Vestnik Leningradskogo Universiteta Seriya Fiziki i
Khimii (Nr 1), 1958, Nr 4,

ABSTRACT: A comparison of the distribution of electron density computed
by means of the Fourier development according to the
intensities of the X-ray reflexes of hexagonal crystals of
cadmium sulfide made it possible to discover a certain
character of the redistribution of electron density with an
increased conductivity of the crystals (Ref. 1). The
modifications of the distribution of electron density observed
were, however, found to be of little importance and were of
the magnitude of general errors. With an increased scale
errors increased accordingly. Methods for the determination
of smaller modifications of electron density, by the
application of which relative errors of calculation are
reduced or entirely eliminated (Ref. 2) therefore deserve

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On the Investigation of the Distribution of Electron
Density in Crystals

54-1-5/17

more attention. In the course of this paper the author maintains that all characteristic modifications of the intensity of reflexes accompanying the increase of crystal conductivity "operate" in the same direction without being contradictory to one another: they form electron bridges between the nearest atomic projections, i.e. between the heterogeneous atoms along the base line of chemical binding and widen the gap of electron density between analogous atoms. For the estimation of the strength or the weakness of electron bridges it is not necessary to build up a complete construction of electron density distribution in the crystal. It is possible to confine oneself to determining the relative modifications of intensity of certain individual types of reflexes. The fact that no complete construction is built up also fully eliminates errors in computation which occur mainly as a result of the effect produced by the disruption of series. The methods worked out can not be employed for direct investigation. They merely serve the purpose of bringing about a more distinct and more clear demonstration of the meaning and the character of the re-distribution processes of electron

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On the Investigation of the Distribution of Electron
Density in Crystals

54-1-5/17

density, with which, by means of the Fourier development, certain modifications of the intensity of X-ray reflexes can be connected if these modifications represent experimental facts. By these methods it is also not possible to obtain a solution in advance concerning the connection existing between the modification of intensity of reflexes and other properties of the crystal, nor do they exercise any influence upon the theoretical interpretation of this phenomenon. There are 5 figures, and 5 references, 3 of which are Slavic.

SUBMITTED: January 30, 1957

AVAILABLE: Library of Congress

1. Crystals-Electrons-Density
2. Crystals-Conductivity
3. Crystals-Theory

Card 3/3

SHUVALOV, Yu.N.

Relationship between electric conductivity and electron density
distribution in germanium crystals. Fiz. tver. tela 1 no.2:208-215
F '59. (MIRA 12:5)

Leningradskiy gosudarstvennyy universitet im. A.A. Zhdanova.
(Germanium crystals)

RUMSH, M.A.; SHUVALOV, Yu.N.; SMIRNOV, L.A.

Effect of illumination on the intensity of X-ray reflections
from cadmium sulfide crystals. Fiz. tver. tela 2 no.2:369-370
F '60. (MIRA 14:8)

1. Leningradskiy gosudarstvennyy universitet imeni A.A.
Zhdanova i Nauchno-issledovatel'skiy fizicheskiy institut.
(Cadmium sulfide crystals) (X rays)

1. YU. M.F.; RYKOVA, V.M. BIRMAN, R.I. SPISHAKOV, V.G. LITVIN, B.M.
POTEMKIN, O.G.; SHUVALOVA, A.M.

Results of the treatment of chronic colitis of infectious etiology
by means of siphon lavage of the intestine with hypotonic solution
of Tsabukan med. Sber. nauch. reb. vrach san.-kur. uchr. profsciuzov
no.1:136-139 '62. (MIRA 78-10)

2. Yeasentukakiy sanatoriy "Kommun. 2" (glavnyy vrach M.I. Ponomarev).

S/191/63/000/003/002/022
B101/B186

AUTHORS: Sorokin, M. F., Lyalyushko, K. A., Dudakova, R. A., Vasil'yev, V. S., Shuvalova, A. N.

TITLE: Copolymers of unsaturated glycidol esters. Copolymerisation of glycidyl methacrylate with methyl methacrylate in solvents

PERIODICAL: Plasticheskiye massy, no. 3, 1963, 3 - 7

TEXT: The copolymerization of glycidyl methacrylate (GMA) with methyl methacrylate (MMA) was conducted in a solution of toluene, dioxane, or cyclohexanone under an atmosphere of nitrogen with 0.1 mole% benzoyl peroxide as initiator, the purpose of this study being to produce polymers containing epoxy groups. GMA was synthesized from epichlorohydrine and sodium methacrylate. Optimum reaction was reached at 90°C and 30% concentration of components. At higher concentrations, the reaction went too fast and the mass became too viscous, making it very difficult to take samples. Lower concentration decelerated the reaction considerably. Copolymerization did not occur at 60°C and 30% concentration. At 50% it was too slow but could be accelerated by increasing the benzoyl peroxide addition to 1%. The re-
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B101/B186

Copolymers of unsaturated...

action was slowest in toluene yielding 77-89%; in dioxane and cyclohexanone it was equally slow yielding 83 - 96%. Reduced viscosity in dioxane was 3.55 - 3.79, in toluene 2.48 - 2.64. The ratio GMA : MMA was varied between 1 : 4 and 4 : 1. The resulting copolymers were white, solid substances soluble in acetone, acetates, dioxane, dichloro ethane, and cyclohexanone. The polydispersion of the copolymers was determined by turbidimetric titration. Pure polyglycidyl methacrylate had the lowest polydispersion, whereas pure polymethyl methacrylate had the highest. The values for the copolymers ranged in between, depending on the molar ratio of components and on the amount of initiator added. Fractionate precipitation showed all fractions to contain equal amounts of glycidic groups: approximately 23% at a ratio GMA : MMA = 1 : 1, ~18% at 1 : 2, ~11% at 1 : 4, ~29% at 2 : 1, and ~33% at 4 : 1. The copolymers were somewhat enriched with GMA and their fractional composition differed from that of a mechanical mixture of components. The copolymerization constants were determined by M. Fineman's and S. D. Ross' method (J. Polymer Sci., 5, 259 (1950)): $r_{GMA} = 0.94$; $r_{MMA} = 0.75$.

There are 6 figures and 3 tables.

Card. 2/2

86678

S/064/60/000/008/006/008
B020/B060

158110

AUTHORS: Sorokin, M. F., Angarskaya, E. Ya., Shuvalova, A. N.

TITLE: Mechanism of the Formation of Epoxy Resins From Epichloro Hydrin and Dioxy Diphenyl Propane

PERIODICAL: Khimicheskaya promyshlennost', 1960, No. 8, pp. 25-34

TEXT: The formation of epoxy resins from dihydric phenol and epichloro hydrin is theoretically possible in two ways: 1) phenyl ether of glycerin monochloro hydrin forms first, which is dehydrochlorinated to the respective diglycide ethers which, by reaction with the hydroxyl groups of the free phenol molecules, give rise to resins, or 2) the diglycide ethers of bivalent phenol are obtained in one stage in the reaction of epichloro hydrin with the sodium phenolate of a bivalent phenol and their further reaction proceeds as above. The former theory seems to be more probable. The reactions of epichloro hydrin, of glycerin dichloro hydrin, and of 1-phenoxy-3-chloropropanol-2 with phenols and with lye were examined. The respective reaction products were identified, the kinetics was studied at 30, 40, 50, and 60°C, and the rate constants were calculated. The

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Mechanism of the Formation of Epoxy Resins
From Epichloro Hydrin and Dioxy Diphenyl
Propane

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B020/B060

hydrolysis of chloro hydrins in NaOH solution was studied (Table 1), the reaction products identified being given in Table 2, and the course of hydrolysis in time at 40° being illustrated in Fig. 1. The same data for the reaction of chloro hydrins with sodium phenolate in water are given in Tables 3 and 4. The reaction of chloro hydrin with phenol and NaOH in water (Fig. 2) and with sodium phenolate in water at 40° (Fig. 3) is illustrated graphically. The comparative reactivity of the chloro hydrins concerned for different reactions is illustrated by the data given in Table 5. The rate constant of the reaction of phenyl glycid ether with different phenols shows a linear dependence on the catalyst concentration (Fig. 4). The dependence of the reaction rate constants K_1 and K_2 of phenyl glycid ether with dioxy diphenyl propane on the catalyst (NaOH) concentration at 90° (Figs. 5,6) is linear, but different from the linear dependence in the reaction of phenyl glycid ether with phenols. The rate constants K_2 and K_1 of the reaction of phenyl glycid ether with dioxy diphenyl propane in bulk are given in Table 7. Fig. 7 is a graph depicting the dependence of the rate constant K_1 of the reaction

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Mechanism of the Formation of Epoxy Resins From
Epichloro Hydrin and Dioxy Diphenyl Propane

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of diphenyl ester of glycerin with phenyl glycid ether on the catalyst (NaOH) concentration at 90°. The reactivity of the secondary hydroxyl is considerably lower than that of phenolic hydroxyls (Table 8). The effect of the ratio of the components upon the properties of synthesized resins was investigated using a) dioxy phenyl propane - epichloro hydrin - NaOH = 1:1.1:1.32, and b) dioxy phenyl propane - epichloro hydrin - NaOH = 1:1.5:1.8. Conditions in the synthesis of resins (Table 9) and the main factors of resins synthesized at 90 and 100° (Table 10) are also given. V. Šupler, M. Lidařík, I. Kincl, and V. Ulbrich are mentioned (Refs. 5,6). There are 7 figures, 10 tables, and 11 references: 2 Soviet, 1 US, 3 British, 3 German, and 4 Czech.

Card 3/3

SOROKIN, M.F.; ANGARSKAYA, E.Ya.; SHUVALOVA, A.N.

Chemistry of the formation of epoxide resins from epichlorohydrin
and dihydroxy diphenylpropane. Khim.prom. no.8:643-652 D '60.
(MIRA 13:12)

(Epoxy resins) (Propane)

SHUVALOVA, E.

CHULANOVSKIY, V. M.; BULANIN, M. O.; DENISOV, G. S.; and SHUVALOVA, E.

"Infrared Absorption Spectra of Some Two- and Three Component Solutions with
Hydrogen Bonding."

report submitted at the 4th International Meeting of Molecular Spectroscopy, Bologna,
Italy, 7-12 Sept 1959.

Physical Institute of the University, Leningrad.

SHOVALOVA, N. N.

Defended his Candidates dissertation in the Mechanics and Mathematics Faculty of Moscow State University on 7 May 1952.

Dissertation: "On the Absolute Convergence of Series of Polynomials."

SC: Vestnik Moskovskogo Universiteta, Seriya Fiziko-Matematicheskikh i
Yestestvennykh Nauk, No. 1, Moscow, Feb 1953, pp 151-157: transl. in
W-29732, 12 April 54, For off. use only.

USSR/Mathematics - Convergence, Jul/Aug 52
Polynomial Sequence

"Upper Convergence of a Sequence of Polynomials,"
E. Z. Shuvalova, Moscow

"Matemat Sbor" Vol XXXI (73), No 1, pp 76-87

In many problems of mathematics a large role is played by polynomials which approximate a function analytical in a certain set S with accuracy $|f(z) - P_n(z)| < \epsilon$ (A). Current article is devoted to the soln of the problem of extending further certain properties of Taylor series (sums) to the entire

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class (A), especially in connection with the convergence of sums. Cites J. Walsh, "Interpolation and Approximation by Rational Functions in the Complex Domain," New York, 1935. Submitted 21 Jan 52.

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SHUVALOVA, E. Z.
~~SHUVALOVA, E. Z.~~

One sufficient condition for the completeness of the system $\{f^{(n)}(z)\}$.
Mat. sbor. 44 no.1:131-136 Ja '58. (MIRA 11:2)
(Functions of complex variables)

DEMIDOVICH, Boris Pavlovich; FARKH, Isaak Abramovich; SHUVALOVA,
Emma Zinov'yeva; LEVITAN, B.M., prof., retsenzent;
SKOLITSKIY, Kh.L., prof., retsenzent; BIRYUK, G.I., red.;
AKHLAMOV, S.N., tekhn. red.

[Numerical methods of analysis; approximation of functions,
differential equations] Chislennyye metody analiza; priblizhe-
nie funktsii, differentsial'nye uravneniia. Pod red. B.P.
Demidovicha. Moskva, Gos. izd-vo fiziko-matem. lit-ry,
1962. 367 p. (MIRA 15:4)
(Functions) (Differential equations)

DEMIDOVICH, Boris Pavlovich; MARON, Isaak Abramovich; SHUVALOVA,
Emma Zinov'yevna; KOPYLOVA, A.N., red.; SHKLYAR, S.Ya.,
tekhn. red.

[Numerical methods of analysis; approximation of functions;
differential and integral equations] Chislennye metody ana-
liza; priblizhenie funktsii, differentsial'nye i integral'-
nye uravneniia. Izd.2., ispr. i dop. Moskva, Fizmatgiz,
1963. 400 p. (MIRA 17:2)

SHUVALOV Pavel Pavlovich; SHUVALOV, P. L.

[Geometry] Geometriia. Pod red. E. L. Shivalovoi. Moskva,
Nauka, 1964. 205 p. (MIRA 19:1)

SHUVALOVA, L.M.

✓ Statics and dynamics of the exchange of Aureomycin and Terramycin ions with hydrogen and sodium ions on cation exchangers. G. V. Samsonov, L. M. Shuvalova, M. P. Shesterikova, S. F. Layrent'eva, V. S. Markanikova, A. A. Kononova, and V. V. Bokareva (Inst. High-Mol. Compds., Acad. Sci. U.S.S.R., Leningrad). *Kolloid. Zhur.* 18, 474-9 (1956); cf. preceding abstr. — The exchange capacity of sulfo resins for Aureomycin (I) and Terramycin (II) was greater the greater the swelling of the resin. The equation $m_1/m_2 = KC_1/C_2$ was valid if m_2 meant the no. of small ions

present in the resin and capable of being exchanged for I or II; m_1 = no. of I or II ions (which are univalent) in the resin, C_1 and C_2 are the concns. of antibiotic and of small ions, resp., in the soln. The exchange const. K of I was 100-220 for Na resins and 130-425 for H resins; the K of II was less for a phosphate resin and a sulfo resin. The uptake of I and II by ion exchangers occurred with a sharp boundary, but their displacement by aq. HCl was very gradual; hence, a soln. of HCl in MeOH had to be used. J. J. Bikerman

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~~SECRET~~
KOPYL, A.N.; LIPSHITS, I.D.; SHUVALOVA, L.S.

Making patent leather by coating flesh layers with polyvinyl chloride
varnish. Leg. prom. 18 no.1:20-21 Ja '58. (MIRA 11:2)
(Leather industry) (Vinyl polymers)

LIFSHITS, I.D.; SHIVALOVA, L.S.; V rabote prinimala uch stiye; BAKHTIAROVA,
Ye.P.

Artificial leather with a stitched nonwoven base. Kozh.-obuv.
pr m. 2 no.8:24-26 Ag '60. (MIRA 13:9)
(Leather, Artificial)

KHOROSHAYA, Ye.S., kand.tekhn.nauk; LYKOVA, A.N., nauchnyy sotrudnik;
KOVRIGINA, G.I., nauchnyy sotrudnik; GORDONOVA, R.D., nauchnyy
sotrudnik; SHUVALOVA, L.S., inzh.; OBUDOVSKAYA, Yu.M., inzh.;
SOKOLOVA, Z.V., inzh.; BEZRUKOVA, V.I., inzh.

New drop method of determining the resistance to heat of
polyvinyl resins. Nauch.-issl.trudy VNIIPK no.12:107-109 '60.
(MIRA 16:2)

(Leather, Artificial)

(Resins, Synthetic—Testing)

LIFSHITS, I. D.; KOPYL, A. N.; ALYAUDDINOV, A. O.; SHUVALOVA, L. S.;
KOMAROVA, Z. V.

Footwear made with polymer materials. Kosh. obuv. prom. 4
no.10:17-19 0 '62. (MIRA 15:10)

(Boots and shoes) (Plastics)

BERNSHTEYN, M.Kh.; YABKO, Ya.M.; BAKHTIAROVA, Ye.R.; SHUVALOVA, L.S.;
ZAYONCHKOVSKIY, A.D.; LIFSHITS, I.D.; GRINYUK, V.G.

Utilization of cotton manufacture wastes for the production
of "IK" artificial leather. Kosh.-obuv. prom. 5 no.6:25-28
Je '63. (MIRA 16:6)

(Leather, Artificial)

L 15341-66 EWT(m)/EWP(j)/T/ETC(m)-6 WW/RM

ACC NR: AP6000972

(N)

SOURCE CODE: UR/0286/65/000/022/0056/0056

AUTHORS: Rotenberg, I. P.; Shcherbina, I. V.; Lifshits, I. D.; Shuvalova, L. S.

ORG: none

TITLE: A method for obtaining foam plastic. Class 39, No. 176390 /announced by
Vladimir Scientific Research Institute for Synthetic Resins (Vladimirskiy nauchno-
issledovatel'skiy institut sinteticheskikh smol)

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 22, 1965, 56

TOPIC TAGS: polymer, resin, plastic, polyvinyl chloride, foam plastic, vinyl, plastic,
plasticizerABSTRACT: This Author Certificate presents a method for obtaining foam plastics (by a
noncompression method) on the basis of polyvinylchloride combined with an elastomer, in
the presence of a plasticizer and with aid of a gas generator. To improve the
properties of the foam plastic and to increase its resistance to frost, the elastomer
consists of chlorosulfonated polyethylene. The proportion of elastomer to polyvinyl-
chloride is 5 to 25 wt parts per 100 wt parts respectively.

SUB CODE: 11/ SUBM DATE: 23Dec63

OC 07/
Card 1/1

UDC: 678.743.22-134.22

YEROPKIN, Yu. I.; Primali uchastiye: KOVAL', E. M.; SEMENOVA, Ye. A.;
YUDINA, L. V.; SHUVALOVA, L. V.

Complex dressing of molybdenum ore. Trudy Mekhanobr no. 131:
191-195 '62. (MIRA 17:5)

L 52092-65 EPF(c)/EPR/EPA(s)-2/EWP(j)/EWT(m)/EEC(t)/T/EWP(v) Pc-4/P1-4/
Pr-4/PS-4/Pt-7 IJP(c) GG/WW/RM
ACCESSION NR: AP5015281 UR/0286/65/000/009/0065/0065

AUTHORS: Eliasberg, I. I.; Teryayeva, I. M.; Kaznachev, B. Ya.; Shuvalova, M. A.

TITLE: A method for roughening a dielectric. Class 39, No. 170653

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 9, 1965, 65

TOPIC TAGS: dielectric, roughness, metallizing, adhesive, plastic, filler

ABSTRACT: This Author Certificate presents a method for roughening a dielectric during its metallization. To obtain a strong adhesion between metal and dielectric and to produce the desired uniformity and purity of the coating, the surface of the dielectric is coated with an adhesive layer consisting of a plastic film and a filler.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut magnitnoy zapisi i tekhnologii radioveshchaniya i televideniya (All-Union Scientific Research Institute of Magnetic Recording and the Technology of Radio and Television Broadcasting)

SUBMITTED: 03Dec63

ENCL: 00

SUB CODE: EM

NO REF SOV: 000

OTHER: 000

Card 1/1

L 37679-66 EWT(1) GD

ACC NR: AT6022321

SOURCE CODE: UR/0000/66/000/000/0057/0064

AUTHOR: Masina, V. F.; Shuvalova, M. N.

ORG: none

TITLE: Horizontal scanning designed with the use of thyristors

SOURCE: Vsesoyuznaya nauchnaya sessiya, posvyashchennaya Dnyu radio. 22d, 1966.
Saktsiya televideniya. Moscow, 1966, 57-64

TOPIC TAGS: tv scanning, tv equipment, tv receiver, semiconductor device, thyristor/
UD-63K thyristor

ABSTRACT: An attempt to use thyristors in the horizontal sweep circuit of a tv receiver is briefly reported. Well-known thyristor characteristics are explained; the thyristor recovery time can be reduced to a fraction by negative-current turn-off techniques (F. D. Bate, Wireless World, June 1965). The T. Tarui thyristor-type sweep circuit is shown, and the principles involved are discussed (A. Samuel et al., IEEE Trans., BTR-9, 1963). Some desultory experimental data is reported. The Soviet-made UD-63K thyristor has these parameters: maximum voltage, 300 v; turn-on time, 10 μ sec; recovery time, 35 μ sec; forward-current peak, 10 amp. A few specimens could operate in the sweep circuit at 15.625 kc; others, at 14.7 kc. The circuit consumption was 18 w (supply voltage, 80 v). Power loss in the nonconducting thyristor, 8 w; it can be reduced by using a thyristor with a lower residual voltage. Orig. art. has: 3 figures and 6 formulas. [03]

SUB CODE: 17,09/ SUBM DATE: 24Mar66 / ORIG REF: 002 / URS REF: 802

Card 1/1

GULYAYEV, B.B.; ALEKSEYEV, P.Ye.; KONONOV, D.R.; STEPANOV, N.M.;
Prinimali uchastiye: SHAPRANOV, I.A.; GARKUSHA, P.I.; KOVALENKO,
P.Ye.; SHUVALOVA, N.A.; SMIRNOVA, N.I.

High strength foundry steel with good weldability. Lit.proizv.
no.2:1-4 G '62. (MIRA 15:2)
(Steel castings--Welding)

S/129/63/000/004/009/014
A004/A127

AUTHORS: Gidon, Ye.D., Alisanova, Z.I., Malyshevskiy, V.A.,
Shuvalova, N.A.

TITLE: The effect of composition and low-temperature thermomechanical
treatment on the mechanical properties of structural steels

PERIODICAL: Metallovedeniye i termicheskaya obrabotka metallov, no. 4,
1963, 36 - 40

TEXT: An investigation of the thermomechanical strengthening of
steels of various compositions revealed some characteristic features of the
alloying effect. Amounts of up to 1.2 - 1.5% Si, particularly in combination
with V, permit an increase of the tempering temperature to 350°C without
considerable reduction of the strengthening effect during low-temperature
thermomechanical treatment. An increase of the Cr-content from 1.5 to
3 - 5% makes also the strength level rise. The effect of low-temperature
thermomechanical treatment of steels containing 3 - 5% Cr alloyed with Mo,
V and W is, to a considerable extent, maintained in tempering up to 500°C
with a comparatively increased ductility. Steels with the composition (in %
0.42 C, 1.13 Si, 0.68 Mn, 3.01 Cr, 1.28 Ni, 0.39 Mo, 0.14 V and 0.39 C,
Card 1/2

The effect of composition and

S/129/63/000/004/009/014
A004/A127

0.14 Si, 0.56 Mn, 4.95 Cr, 0.32 Ni, 1.23 Mo, 0.53 V respectively after low-temperature thermomechanical treatment and tempering at 500°C had $\sigma_b = 240 \pm 255 \text{ kg/cm}^2$, $\delta = 10 \pm 13\%$, $\psi = 30 \pm 35\%$; after tempering at 350°C the respective values were: $\sigma_b = 255 \pm 265 \text{ kg/cm}^2$, $\delta = 8 \pm 12\%$, $\psi = 28 \pm 36\%$. There are 5 figures and 1 table.

Card 2/2

GIDON, Ye.D., MALYSHEVSKIY, V.A., PRUS, A.A.; SHUVALOVA, N.A.;
POMERANTSEV, D.M.

Elastic deformation of structural steel. Metalloved. 1
term. obr. met. no. 2-35-37 F '65. (MIRA 18:12)

STOLYAROVA, I.A.; SHUVALOVA, N.I.

Determining strontium by flame photometry. Inform.sbor.VSEGEI
no.51:89-96 '61. (MIRA 15:8)
(Strontium—Analysis) (Photometry)

STOLYAROVA, I.A.; SHUVALOVA, N.I.

Photocolorimetric determination of iron and aluminum. Inform.
sbor.VSEGEI no.51:97-102 '61. (MIRA 15:8)
(Colorimetry) (Iron--Analysis) (Aluminum--Analysis)

KAMENTSEVA, L.G.; MOYZHES, I.B.; STOLYAROVA, I.A.; SHUVALOVA, N.I.

Complexometric analysis of siliceous rocks. Inform.sbor.
VSEGEI no.51:103-111 '61. (MIRA 15:8)
(Rocks, Siliceous--Analysis)

PONOMAREV, V.V.; SOSEDOV, N.I.; ALEKSEYEVA, T.A.,¹ SHUVALOVA, N.P.;
DROZDOVA, Z.B.

Effect of wheat grain fat on the combustion heat of gliadin during
its warming. Dokl. AN SSSR 162 no.4:960-961 Je '65. (MIRA 18:5)

1. Moskovskiy gosudarstvennyy universitet. Submitted July 20, 1964.

PONYATOVSKIY, V.V.; SUKHORETSKAYA, N.M.; SHUVALOVA, N.S.

New materials for packing food products. Zhur. VIKHO 5 no.4:413-
419 '60. (MIRA 13:12)

(Food handling)

STRAKHOV, V.V., kand. tekhn. nauk; GISIN, I.B., kand. sel'khoz. nauk;
KUZ'MIN, Yu.N.; TOMBAYEV, N.I.; SHUVALOVA, N.S., nauchnyy
red.; ZORINA, G.V., red.; KOVAL'SKAYA, I.F., tekhn. red.

[Modern equipment for making creamery butter]Sovremennoe oborudovanie dlia proizvodstva slivochnogo masla. Moskva, TSentr. in-t nauchno-tekhn. informatsii mashinostroeniia, 1962. 55 p.
(MIRA 16:4)

(Food machinery--Design and construction)
(Creameries--Equipment and supplies)

ZUYKOV, V.Ya.; IVANOV, A.M.; KRISTALL, Z.B.; MAKSIMOVA, N.K.; NOVIKOV, O.P.; POTKOV, G.A.; KRIKUNOV, A.Ye., red.; SELEKHOV, P.M., red.; SHUVALOVA, N.S., red.; ZORINA, G.V., red.; VINOGRADOV, Ye.A., tekhn. red.

[Liquid separators for the food industry; handbook-catalog] Separatory zhidkostnye dlia pishchevoi proryshlennosti; katalog-spravochnik. Moskva, 1962. 86 p. (MIRA 15:10)

1. Moscow. Tsentral'nyy institut nauchno-tekhnicheskoy informatsii mashinostroyeniya. 2. Vsesoyuznyy nauchno-issledovatel'skiy i eksperimental'no-konstruktorskiy institut prodovol'stvennogo mashinostroyeniya (for Zuykov, Ivanov, Kristall, Maksimova, Novikov, Potkov).

(Separators (Machines))

KOVALENKO, N.A.; TOMBAYEV, N.I.; KRIKUNOVA, A.Ye., red.; SELEKHOVA, P.M.,
~~red.~~; ~~SELEKHOVA, N.S., red.~~; ZORINA, G.V., red.; VINOGRADOV, Ye.A.,
tekhn. red.

[Catalog; technical equipment of dairy industry enterprises]
Katalog; tekhnologicheskoe oborudovanie predpriatii moloch-
noi promyshlennosti. Moskva, 1962. 123 p. (MIRA 15:11)

1. Moscow. Tsentral'nyy institut nauchno-tekhnicheskoy infor-
matsii mashinostroyeniya. 2. Vsesoyuznyy nauchno-issledovatel'-
skiy i eksperimental'no-konstruktorskiy institut prodovol'-
stvennogo mashinostroyeniya (for Kovalenko, Tombayev).

(Dairy industry—Equipment and supplies)

LAGOSHA, I.A.; KOVALENKO, N.A.; KUKUNOV, A.Ye., red.;
SHUVALOVA, N.S., nauchn. red.; KITAINA, L.B., nauchn.
red.; BOBAKOV, A.N., red.

[Technical equipment for meat combines; catalog] Tekhno-
logicheskoe oborudovanie miasokombinatsiy; katalog. Mo-
skva, TsINTIA, 1963. 138 p. (MIRA 17:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy i eksperimental'no-
konstruktorskiy institut proizvodstva mashinostroyeniya
(for Lagosha, Kovalenko)

CHERNOMIVANNIK, A.Ya., inzh.; BOBAKOV, A.N., red.; SELEKHOV, P.M.,
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[Technological equipment for confectionaries; catalog and
handbook] Tekhnologicheskoe oborudovanie predpriatii kon-
ditorskoi promyshlennosti; katalog-spravochnik. Moskva,
TSintiam. Pt.1-2. 1963.

LIPATOV, N.N.; ASRIYEV, Ye.I.; SHUVALOVA, N.S., nauchn. red.

[Investigation of the work processes and improvement of the design of milk separators] Issledovanie rabochikh protsessov i sovershenstvovanie konstruktsii molochnykh separatorov. Moskva, TSentr. in-t nauchno-tekhn. informatsii po avtomatizatsii i mashinostroeniiu, 1964. 71 p. (Seria OS-XVII) (MIRA 17:12)

ПОСТАНОВЛЕНИЕ А. И. ШИВАЛОВА, Н. И. П. П.

[Modern standard equipment for the boiling, crystallization and bleaching of masscuite in beet sugar manufacture]
Современное типвое оборудование для варки, кристаллизации и пробытки утфеlei в свеклосахарном производстве. Москва, Центр. ин-т научно-техн. информатии по автоматизации и машиностроению, 1964. 86 п. (MIRA 18:5)

SHUVALOVA, T.A.

Effect of periodic chilling of eggs on cell dimensions of the chick
embryo. Uch.zap.Ped.inst.Gerts.110:75-91 '55. (MLRA 9:7)
(Embryology--Birds) (Poultry) (Cold--Physiological effect)